

NORLITE, LLC

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January 23, 2013

Karen M. Gaidasz, CPESC
Environmental Analyst
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014
RETURN RECI

RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng Air Compliance Branch United States Environmental Protection Agency Region 2 290 Broadway New York, NY 10007-1866 RE

RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report

Kiln 1: 01/07/13 – 01/22/13 Kiln 2: 01/07/13 – 01/22/13

Dear Sirs:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite Corporation (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 01/07/13 thru 01/22/13. The attached document explains each of the "malfunctions" for Kilns One & Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. The stack gas cutoffs associated with Kiln 2 were corrected on January 14th and 15th during a shutdown. During that time, the Kiln 2 scrubber was cleaned and repaired which should correct the systemic issues causing the stack gas cutoffs. The stack gas cutoffs associated with Kiln 1 are more complex in that some of the internals of the Kiln 1 Ducon are starting to fail. These internals will be repaired or replaced during a planning 10 day shutdown starting on February 04, 2013. Once the internals are repaired or replaced, there should be much less water and soda ash solids contacting the Mist Pad which is contributing the stack gas cutoffs. As stated previously, Norlite and its consultant believe the stack gas cutoffs which are less than 2 minutes in duration to be associated with water droplets hitting the probe.

Norlite is preparing a protocol for the installation of the new scintillation technology flow meters to start the process of side by side data comparison. The hope is to gather data showing the accuracy of the new instruments and then seek approval to remove the current stack probes and to continue using the new monitors. The installation protocol will be completed and stamped by an independent engineer in the near future.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

DCL: 2413

Norlite CARANDED SHALE AGGREGAL

NORLITE, LLC

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tvanvranken@norlitecorp.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments

James Lansing, NYSDEC – CO w/attachments Joe Hadersbeck, NYSDEC – R4 w/attachments

Tita LaGrimas, Tradebe



NORLITE, LLC MACT EXCEEDANCE REPORT - KILN 1 01/07/13 - 01/22/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
1/7/2013	10:12:43	1/7/2013	10:22:59	0:10:16	2	Malfunction	The Main Ball Valve Used for LGF Flow Control Became Partially Plugged. When the Ball Valve was Adjusted to Increase LGF Flow, A Sudden Fuel Flow Surge Occurred Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Ball Valve Was Cleared to Establish Proper Fuel Flow
1/7/2013	10:23:48	1/7/2013	10:25:37	0:01:49	3	Malfunction	Residual Solids Material in the LGF Line Before the Ball Valve Caused a Partial Blockage Resulting in a Fuel Surge That Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	Ball Valve Was Cleared to Establish Proper Fuel Flow
20.10	. 0.20.10	.,,,_0,,	. 0.20.0	0.0	·		The End of the Burn Tank Was Reached Which Caused a Surge in the LGF Flow, Triggering the Upper Instantaneous Setpoint to be Reached for LGF			Switched Tanks and
1/9/2013	17:20:08	1/9/2013	17:42:22	0:22:14	4	Malfunction	Flow Span Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Soda Ash Solids Coating	LGF Flow	Span	Reestablished Fuel Flow
1/11/2013 1/11/2013	5:01:52 6:44:22	1/11/2013	5:16:28 9:47:21	0:14:36 3:02:59	5 6	Malfunction Malfunction	the Stack Gas Probe Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span / Rinsed Mist Pad	Stack Gas Flow Rate Stack Gas Flow Rate	Span Span	Rinsed Mist Pad Adjusted Fuel Flow and Rinsed Mist Pad
1/11/2013	13:02:29	1/11/2013	14:04:36	1:02:07	7	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span / Meter Tripped	Scrubber pH	Span	Adjusted Scrubber pH and Reset Meter
1/13/2013	4:20:06	1/13/2013	4:37:38	0:17:32	8	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span/Re-establishing Blowdown Flow	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/13/2013	13:31:42	1/13/2013	14:20:45	0:49:03	9	Malfunction	•	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/14/2013	10:58:20	1/14/2013	11:05:35	0:07:15	10	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/14/2013	16:00:01	1/14/2013	16:01:11	0:01:10	11	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber Recirc. Span Due to the Flow Meter Faulting Instantaneous Upper Instrument Setpoint Reached	Scrubber Recirc. Rate	Span	I&E Replaced the Flow Meter
1/14/2013	16:56:01	1/14/2013	16:58:29	0:02:28	12	Malfunction	for Stack Gas Span Instantaneous Upper Instrument Setpoint Reached	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/14/2013	17:18:04	1/14/2013	17:21:06	0:03:02	13	Malfunction	for Scrubber Recirc. Span Due to the Flow Meter Faulting Instantaneous Upper Instrument Setpoint Reached	Scrubber Recirc. Rate	Span	I&E Replaced the Flow Meter
1/14/2013	17:47:12	1/14/2013	17:51:14	0:04:02	14	Malfunction	for Scrubber Recirc. Span Due to the Flow Meter Faulting	Scrubber Recirc. Rate	Span	I&E Replaced the Flow Meter
1/16/2013	16:42:13	1/16/2013	16:42:37	0:00:24	15	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span	Scrubber pH	Span	Adjusted Scrubber pH
1/16/2013	16:45:48	1/16/2013	16:46:19	0:00:31	16	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span Due the Sample Loop Being Partially Plugged With Solids From the Scrubber System	Scrubber pH	Span	I&E Cleared the Sample Loop and Recalibrated the pH Probe



NORLITE, LLC MACT EXCEEDANCE REPORT - KILN 1

01/07/13 - 01/22/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
1/20/2013	14:37:27	1/20/2013	14:37:43	0:00:16	17	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span Due the Sample Loop Being Partially Plugged With Solids From the Scrubber System	Scrubber pH	Span	I&E Cleared the Sample Loop and Recalibrated the pH Probe
1/20/2013	23:37:49	1/20/2013	23:39:31	0:01:42	18	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span Due the Sample Loop Being Partially Plugged With Solids From the Scrubber System	Scrubber pH	Span	I&E Cleared the Sample Loop and Recalibrated the pH Probe
4/04/0040	0.40.04	1/04/0040	40.00.00	0.07.40	40		Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span/Unrelated to the Stack Gas Cutoff, the Ducon Scrubber System was Partially Frozen and Needed to be Thawed/Mist Pad Was	Steel Con Flow Pate	Cana	Adicated Fuel Floor
1/21/2013	8:10:34	1/21/2013	16:38:23	8:27:49	19	Malfunction	Flushed	Stack Gas Flow Rate	Span	Adjusted Fuel Flow



NORLITE, LLC MACT EXCEEDANCE REPORT - KILN 2

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	SHALE AGGRE			_		_	01/07/13 - 01/22/13	_		
Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
1/7/2013	9:44:35	1/7/2013	9:45:03	0:00:28	16	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/9/2013	8:02:45	1/9/2013	8:03:29	0:00:44	17	Malfunction	Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span Due to Using Valves to Control LGF Flow Rate With High LGF Line Pressure	LGF Flow	Span	Adjusted Fuel Flow
1/9/2013	9:37:38	1/9/2013	9:40:54	0:03:16	18	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/9/2013	18:06:47	1/9/2013	19:14:40	1:07:53	19	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/9/2013	19:15:41	1/9/2013	19:15:59	0:00:18	20	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/9/2013	22:32:27	1/9/2013	22:36:49	0:04:22	21	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Probe Being Dirty	Stack Gas Flow Rate	Span	I&E Cleaned the Probe
1/10/2013	12:22:12	1/10/2013	12:22:41	0:00:29	22	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/10/2013	15:26:09	1/10/2013	15:27:02	0:00:53	23	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/11/2013	1:24:17	1/11/2013	1:24:41	0:00:24	24	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/11/2013	1:24:48	1/11/2013	1:25:03	0:00:15	25	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13



NORLITE, LLC MACT EXCEEDANCE REPORT - KILN 2 01/07/13 - 01/22/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
1/11/2013	1:34:35	1/11/2013	2:19:11	0:44:36	26	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span/High Stack Gas HRA	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/11/2013	2:28:11	1/11/2013	2:39:16	0:11:05	27	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/11/2013	13:35:49	1/11/2013	14:11:06	0:35:17	28	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Probe Being Dirty Instantaneous Upper Instrument Setpoint Reached	Stack Gas Flow Rate	Span	I&E Cleaned the Probe
1/11/2013	17:22:07	1/11/2013	17:23:16	0:01:09	29	Malfunction	for Stack Gas Span Instantaneous Upper Instrument Setpoint Reached	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/11/2013	19:20:22	1/11/2013	21:51:19	2:30:57	30	Malfunction	for Stack Gas Span / Flushed Mist Pad	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
1/12/2013	20:32:53	1/12/2013	20:33:33	0:00:40	31	Malfunction	An In-depth Inspection of the Kiln Was Conducted on 01/07/13 to Try to Determine the Cause for the Continued Kiln Pressure Cutoffs. It was Found that Several Frontend Seals Were Damaged. No Emissions Were Witnessed.	Front Kiln Pressure, 1 Second Delay	Opl	The Seals Were Replaced During A Kiln Shutdown on 01/14/13
1/20/2013	4:37:48	1/20/2013	4:52:41	0:14:53	32	Malfunction	Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span Due to the End of the Burn Tank Being Reached Caused A Fuel Surge	LGF Flow	Span	Switched Tanks and Adjusted Fuel Flow
1/20/2013	4:56:21	1/20/2013	5:58:40	1:02:19	33	Malfunction	After a Tank Switch, the LGF Pump Started to Pulse Which Caused the Flame to Pulse and CO's to Rise	Carbon Monoxide	Opl	Adjusted the LGF Pump and Pump Pressure